

**SEARS**

**CRAFTSMAN**

**Model No.  
919.721970**

**IMPORTANT:**  
Read the Safety Guidelines  
and All Instructions  
Carefully Before Operating

**GENERAL MANUAL FOR  
ONE STAGE  
AIR COMPRESSOR**

**ASSEMBLY  
OPERATION  
MAINTENANCE  
REPAIR PARTS**

Record in the spaces provided.

- (1) The model number, which can be found on the label on the front of the air tank saddle.
- (2) The code number, which can be found on the foil label on the side of the air tank.
- (3) The Manufacturers Number (ASME code compressors only) is located on the metal data plate which is welded onto the side of the air tank. (This data plate is painted the same color as the tank.)
- (4) The Motor Manufacturer's name, which is located on the motor label.
- (5) The Motor Mfg. number -- also located on the motor label.

Retain these numbers for future reference.

Model No. \_\_\_\_\_

Code No. \_\_\_\_\_

Mfg. No. \_\_\_\_\_

Motor Mfg. Name \_\_\_\_\_

Motor Mfg. No. \_\_\_\_\_

Sears-Canada, Inc., Toronto, Ont. M5B 2B8

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## FULL ONE YEAR WARRANTY ON AIR COMPRESSORS

If this air compressor fails due to a defect in material or workmanship within one year from the date of purchase, RETURN IT TO THE NEAREST SEARS SERVICE CENTER/DEPARTMENT THROUGHOUT CANADA AND SEARS WILL REPAIR IT, FREE OF CHARGE.

If this air compressor is used for commercial or rental purposes, the warranty will apply for ninety days from the date of purchase.

This warranty gives you specific legal rights and you may have other rights which vary from province to province.

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# SAFETY GUIDELINES

This manual contains information that is important for you to know and understand. This information relates to protecting your safety and preventing equipment problems. To help you recognize this information, we use the following symbols. Please read the manual and pay special attention to sections headed by these symbols.

**WARNING**

**CAUTION**

**IMPORTANT SAFETY INFORMATION -- A HAZARD THAT *MIGHT* CAUSE SERIOUS INJURY OR LOSS OF LIFE.**

Information for preventing damage to equipment.

**Note**

Information that you should pay special attention to.

**WARNING**

**HAZARDS CAN OCCUR IF EQUIPMENT IS NOT USED PROPERLY. PLEASE READ THE FOLLOWING CHART.**

| WHAT TO LOOK FOR    | WHAT COULD HAPPEN  | HOW TO PREVENT IT  |
|---------------------|--|--|
| Hot Parts           | The compressor head and discharge tubes get hot when the air compressor is running. If you touch them, you can be seriously burned.  | Never touch the air compressor head or tubes during or immediately after operation.  |
| Flammable Vapors    | It is normal for the motor's electrical contacts to spark when the compressor starts or stops. A spark can ignite flammable vapors from gasoline, flammable paints or solvents, causing a fire or explosion.   | Always operate the air compressor in well ventilated areas; free of gasoline, flammable paint or solvent vapors.<br><br>Do not operate the compressor near the spray area.<br><br>If spraying a flammable material, provide ample ventilation. Never spray in a closed area. There must be a flow of fresh air at all times. |
| Unsuitable Solvents | The solvents 1,1,1 - Trichloroethane and Methylene Chloride can chemically react with aluminum used in paint spray guns, paint pumps, etc., and cause an explosion. These solvents can also react with galvanized components and cause corrosion and weakening of parts. This does not affect your air compressor, but it may affect the equipment being used. | If the material you intend to spray contains the solvents listed at left (read the label or data sheet), do not use accessories that contain aluminum or galvanized parts. You must either change the material you intend to spray, or use only stainless steel spray equipment.   |
| Compressed Air      | Compressed air can propel dust, dirt or loose particles it comes in contact with. These propelled particles may cause serious injury or damage.<br><br>Too much air pressure applied to air tools or accessories can cause damage or risk of bursting.   | Never point any nozzle or sprayer toward a person or any part of the body.<br><br>Always wear safety goggles or glasses when using the air compressor.<br><br>Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating.   |
| Electricity         | Your air compressor is powered by electricity. Like any other electrically powered device, if it is not used properly it may cause electrical shock.   | Always turn off and lock out electrical power prior to maintenance or repair.<br><br>Wiring of the pressure switch, motor and ON/OFF switch should be done by a licensed electrician in accordance with national and local codes.  |

## SAFETY GUIDELINES

| WHAT TO LOOK FOR | WHAT COULD HAPPEN   | HOW TO PREVENT IT   |
|------------------|---|---|
| Moving Parts     | This compressor cycles automatically when the pressure switch is in the ON/AUTO position. If you attempt repair or maintenance while the compressor is operating, or with the switch in the ON/AUTO position, you can expose yourself to moving parts. These moving parts can cause serious injury or damage if they come into contact with you or your clothing. | <p>Always turn off and lock out power before repair or maintenance.</p> <p>Never operate the compressor with the belt guard removed.</p>  |
| Toxic Vapors     | <p>It is normal for compressed air to contain toxic or irritating vapors. Such vapors are harmful if inhaled.</p> <p>Certain materials you are spraying (like paint, weed killer, sand or insecticide) can be harmful if you inhale them.</p>   | <p>Never directly inhale the compressed air produced by this unit.</p> <p>Read labels and safety data for all materials you spray. Follow all safety precautions.</p> <p>Use a mask or respirator if there is a chance of inhaling toxic sprayed materials.. Masks and respirators have limits and will only provide protection against some kinds and limited amounts of toxic material. Read mask and respirator instructions carefully. Consult with a safety expert or industrial hygienist if you are not sure about the use of a certain mask or respirator.</p>  |
| Air Tank         | <p>Modifications to the air compressor can cause the air tank to rupture or explode.</p> <p>Changing the air tank will cause it to weaken. The tank can rupture or explode.</p>   | <p>Do not adjust, remove or tamper with the safety valve or pressure switch. If safety valve or pressure switch replacement is necessary, a part with the same pressure rating must be used.</p> <p>Never use a motor with a higher horsepower rating than the one supplied.</p> <p>Do not substitute a gas engine for the motor...this compressor was not designed to be powered by a gasoline engine.</p> <p>Never replace the compressor pump with a different model.</p> <p>Never increase the compressor pump speed.</p> <p>Never drill into, weld, or in any way modify the air tank. Do not repair a leaking tank; it must be replaced.</p> <p>Never replace the air tank with a different model or a larger tank.</p> |
| Vibration        | If your compressor is not properly anchored, it will vibrate. Excessive vibration can cause tank rupture or explosion.  | Make sure your air compressor is bolted to the floor. See <i>Installation and Break-in Procedures</i> in this manual.   |

## SPECIFICATION CHART

|   |                          |
|---|--------------------------|
| <b>Model No.</b>                          | <b>919.721970</b>        |
| <b>Horsepower</b>                         | <b>5</b>                 |
| <b>Displacement CFM at Max. Pressure</b>  | <b>14.0</b>              |
| <b>Bore</b>                               | <b>2 7/8"</b>            |
| <b>Stroke</b>                             | <b>2"</b>                |
| <b>Voltage - Single Phase</b>             | <b>220</b>               |
| <b>Minimum Branch Circuit Requirement</b> | <b>20 amp</b>            |
| <b>*Fuse Type</b>                         | <b>Fusetron Type "T"</b> |
| <b>Amperage at Max. Pressure</b>          | <b>15</b>                |
| <b>Air Tank Capacity - Gallons</b>        | <b>50 imp. gal. ASME</b> |
| <b>Approximate Cut-in Pressure</b>        | <b>100 psig</b>          |
| <b>Approximate Cut-out Pressure</b>       | <b>125 psig</b>          |
| <b>SCFM @ 125 psig</b>                    | <b>9.2</b>               |
| <b>SCFM @ 90 psig</b>                     | <b>10.2</b>              |
| <b>SCFM @ 40 psig</b>                     | <b>12.5</b>              |

\*A circuit breaker is preferred. Use only a fuse or circuit breaker that is the same rating as the branch circuit the air compressor is operated on.

## GLOSSARY

**CFM:** Cubic feet per minute.

**SCFM:** Standard cubic feet per minute; a unit of measure of air delivery.

**PSIG:** Pounds per square inch gauge; a unit of measure of pressure.

**ASME:** American Society of Mechanical Engineers; made, tested, inspected and registered to meet the standards of the ASME.

**Cut-In Pressure:** While the motor is off, air tank pressure drops as you continue to use your accessory. When the tank pressure drops to a certain low

level the motor will restart automatically. The low pressure at which the motor automatically re-starts is called "cut-in pressure."

**Cut-Out Pressure:** When you turn on your air compressor and it begins to run, air pressure in the air tank begins to build. It builds to a certain high pressure before the motor automatically shuts off - protecting your air tank from pressure higher than its capacity. The high pressure at which the motor shuts off is called "cut-out pressure."

**To Lock-Out Power:** Place a lock on the line power switch so no one else can turn on the power.

## ACCESSORIES FOR USE WITH SEARS AIR COMPRESSORS

The following accessories are available through the current general sales catalog or at full-line Sears stores.

- SPRAY GUNS
- PAINT TANKS
- AIR TOOLS
- BLOW GUNS
- AIR TANKS
- Sanders
- AIR CAULKING GUNS
- INFLATOR KITS
- Drills
- AIR POWERED WASHER GUNS
- QUICK CONNECTOR SETS
- Impact wrenches
- SAND BLASTERS
- (various sizes)
- Hammers
- AIR BRUSHES
- VISCOSIMETER
- AIR HOSE
- AIR LINE FILTERS
- AIR PRESSURE REGULATORS
- 1/4", 5/16" OR 3/8" I.D.
- TIRE AIR CHUCKS
- OIL FOG LUBRICATORS
- in various lengths

## GENERAL INFORMATION

You have purchased an air compressor unit consisting of a 2 cylinder, single stage air compressor pump, an ASME air tank, associated controls and instruments. This air compressor must be permanently mounted in place.

Your air compressor can be used for operating paint spray guns, air tools, caulking guns, grease guns, air brushes, sandblasters, inflating tires and plastic toys,

spraying weed killers, insecticides, etc. An air pressure regulator is usually necessary for most of these applications. Regulators can be purchased from most Sears stores or through the Sears General Catalog or Power Tool Catalog.

Separate air transformers which combine the functions of air regulation and/or moisture and dirt removal should be used where applicable.

## DESCRIPTION OF OPERATION



**Air Compressor Pump:** To compress air, the pistons move up and down in the cylinders. On the downstroke, air is drawn in through the air intake filter and then through the air intake valves. The exhaust valve remains closed. On the upstroke of the piston, air is compressed. The intake valves close and compressed air is forced out through the exhaust valve, through the outlet tube, through the check valve and into the air tank. Working air is not available until the compressor has raised air tank pressure above that required at the air outlet.

**Check Valve:** When the air compressor is operating, the check valve is "open," allowing compressed air to enter the air tank. When the air compressor reaches "cut-out" pressure, the check valve "closes," allowing air pressure to remain inside the air tank. If the air is not unloaded, the motor will try to start, but will be unable to. The check valve allows the motor to restart freely.

**Pressure Switch:** The pressure switch automatically starts the motor when the air tank pressure drops below the factory set "cut-in" pressure. It stops the motor when the air tank pressure reaches the factory set "cut-out" pressure.

**Pressure Release Valve:** The pressure release valve is designed to automatically release compressed air from the compressor head and the outlet tube when the air compressor reaches "cut-out" pressure or is shut off. If the air is not released, the motor will try to start, but will be unable to. The pressure release valve allows the motor to restart freely. When the motor stops running, air will be heard escaping for a few seconds. No air should be heard leaking when the motor is running.

**Safety Valve:** If the pressure switch does not shut off the air compressor at or near its cut-out pressure setting, the safety valve will protect against high pressure by "popping out" at its factory-set pressure (slightly higher than the pressure switch cut-out setting).

# INSTALLATION AND BREAK-IN PROCEDURES

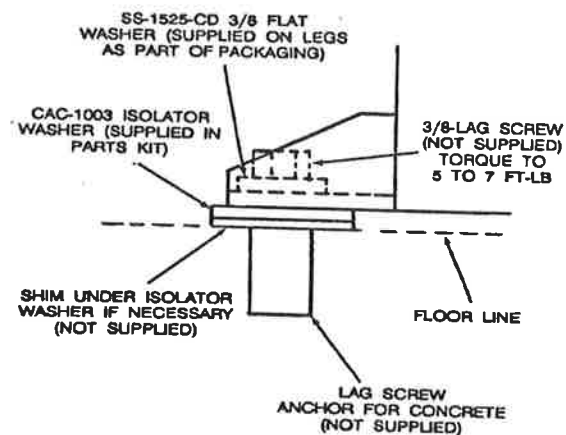
## Location of the Air Compressor

Operate the air compressor in a clean, dry and well ventilated area. The air intake filter must be kept clear of obstructions which could reduce air delivery of the air compressor. The air compressor should be located at least 12" away from walls or other obstructions that could interfere with the flow of air through the fan bladed flywheel. The air compressor crankcase and head are designed with fins to provide proper cooling. If humidity is high, a Sears air filter can be installed on the air outlet adapter to remove excessive moisture.

The air compressor should be as near to air outlets as possible in order to avoid long pipe lines. Do not place the air compressor where heat is excessive.

### WARNING

EXCESSIVE VIBRATION MAY WEAKEN THE AIR TANK AND CAUSE AN EXPLOSION. THE OUTFIT MUST BE MOUNTED AS DESCRIBED AND ILLUSTRATED BELOW.



1. The air compressor must be bolted to the floor. Bolting holes are provided in the base feet.
2. Mount the air compressor on a solid, level foundation with no strain to the air tank feet. Solid shims may be used if necessary.

## Piping

### CAUTION

Plastic or PVC pipe is not designed for use with compressed air. Regardless of its indicated pressure rating, plastic pipe can burst from air pressure. Use only metal pipe for air distribution lines.

If a pipe line is necessary, use pipe that is the same size as the air tank valve. Piping that is too small will restrict the flow of air. If piping is over 100 feet long, use the next larger size. Bury underground lines below the frost line and avoid pockets where condensation can gather and freeze. Apply pressure before underground lines are covered to make sure all pipe joints are free of leaks.

## Lubrication and Oil

### CAUTION

Compressors are shipped without oil. Do not attempt to operate this air compressor without first adding oil to the crankcase.

Place unit on a level surface. Remove oil fill plug and slowly add a special compressor oil such as Sears 9-71441 or SAE 20-20W SF motor oil until it is even with the top of the oil fill hole. (It must not be allowed to be lower than 3/8" -- 6 threads down -- from the top.) When filling the crankcase, the oil flows very slowly. If the oil is added too quickly, it will overflow and appear to be full. (Crankcase oil capacity is 16 fluid ounces.) Under winter-type conditions use SAE 10W oil. (Multi-viscosity oil -- 10W 30 -- will leave carbon deposits on critical components reducing performance and compressor life.) Replace oil fill plug.

## Wiring Instructions

### WARNING

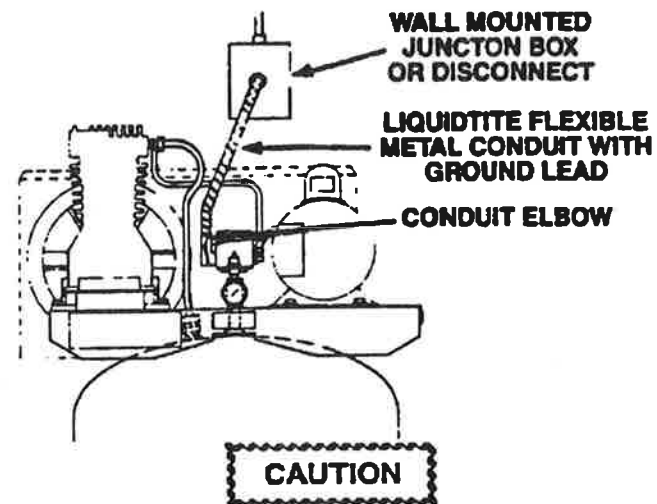
IMPROPER GROUNDING CAN RESULT IN ELECTRICAL SHOCK. WIRING OF THE PRESSURE SWITCH, ELECTRIC MOTOR AND MANUAL ON/OFF SWITCH SHOULD BE DONE BY A LICENSSED ELECTRICIAN IN ACCORDANCE WITH NATIONAL AND LOCAL CODES AND ORDINANCES.

To prevent added current draw and motor overheating, we recommend the use of 12 gauge (AWG) wire, not exceeding a 70 foot length. The wire must be rated at a minimum temperature of 75° C.

When connecting wires, make sure that: (1) the electrical box is large enough; (2) service is of adequate amperage rating; (3) the supply line has the same electrical characteristics (voltage, cycles and phase) as the motor; (4) the line wire is the proper size and (5) no other equipment is operated from the same line. Various national and local codes and standards have been set up covering electrical apparatus and

## INSTALLATION AND BREAK-IN PROCEDURES

wiring. These should be consulted and observed. Our recommended wire sizes may be smaller than the minimum set up by local ordinances. If so, the larger size wire should be used to prevent excessive line voltage drop. For wiring instructions, see the diagram inside the pressure switch cover.



Electrical wiring must be located away from hot surfaces such as the compressor head, compressor cylinder or compressor outlet tube.

### Break-in Procedures

#### CAUTION

Serious damage may result if the following break-in instructions are not closely followed.

This procedure is required only once; before the air compressor is put into service.

1. Recheck compressor wiring. Make sure wires are secure at all terminal connections. Free all contacts of loose wire cuttings, etc.
2. Check oil level in the crankcase before operation. The oil level should be even with the top of the fill hole, and must not be allowed to be lower than  $3/8$ " (six threads down) from the top at any time. Add oil if level is low.
3. Open the outlet valve fully, to permit air to escape and to prevent pressure build-up in the air tank.
4. Turn ON the air compressor.
5. Run the air compressor for 30 minutes to seat the rings and lubricate all internal surfaces.
6. Check all air line fittings and connections/piping for air leaks by applying a soap solution. Correct as necessary. Even minor leaks can cause this air compressor to overwork, resulting in premature breakdown or inadequate performance.
7. Check for excessive vibration and noise. Adjust air compressor belt guard as necessary to eliminate chatter. Re-adjust or shim the air compressor feet, if necessary for proper level.
8. Close the outlet valve and let the air compressor pump up to cut-out pressure. Turn the air compressor off and check oil level. Add oil if necessary. Connect the air hose to the air outlet adapter.

Your compressor is now ready for use.

## OPERATING PROCEDURES

#### CAUTION

Compressed air from the outfit may contain water condensation and oil mist. Do not spray unfiltered air at an item that could be damaged. Some air operated tools or devices may require filtered air. Read the instructions for the air tool or device.

1. Before attaching an air hose or accessory, make sure the Globe Valve OFF/AUTO lever is in the "OFF" position.
2. Attach hose and accessory.

#### WARNING

TOO MUCH AIR PRESSURE CAUSES A HAZARDOUS RISK OF BURSTING. CHECK THE MANUFACTURER'S MAXIMUM PRESSURE RATING FOR AIR TOOLS AND ACCESSORIES. THE REGULATOR OUTLET PRESSURE MUST NEVER EXCEED THE MAXIMUM PRESSURE RATING.

3. Turn the compressor on and allow tank pressure to build. The motor will stop when tank pressure reaches cut-out pressure.

Your outfit is ready for use.



# MAINTENANCE

## WARNING

UNIT CYCLES AUTOMATICALLY WHEN POWER IS ON. WHEN DOING MAINTENANCE, YOU MAY BE EXPOSED TO VOLTAGE SOURCES, COMPRESSED AIR OR MOVING PARTS. PERSONAL INJURIES CAN OCCUR. BEFORE PERFORMING MAINTENANCE OR REPAIR, TURN OFF AND LOCK OUT ELECTRIC POWER AND BLEED OFF AIR TANK PRESSURE. NEVER OPERATE THE COMPRESSOR WITH THE BELT GUARD REMOVED.

## Air Compressor

A clean air compressor runs cooler and provides longer service. Clean or blow off fins and any other parts of the air compressor that collect dust or dirt. Do not place rags, containers or other material on or against the ventilation openings in the belt guard. Adequate ventilation is necessary to maintain proper air compressor operating temperature.

## Air Filter - Inspection and Replacement

### NOTE

Keep the air filter clean at all times. Do not operate the compressor with the air filter removed.

A dirty air filter will not allow the compressor to operate at full capacity. Before you use the compressor, check the air filter to be sure it is clean.

If it is dirty, remove the screws and filter retainer. Pull out the filter, replace with new.

## Oil - Checking and Changing

### CAUTION

Overfilling with oil will cause premature compressor failure. Do not overfill.

Check oil level in the crankcase daily. The oil level should be even with the top of the fill hole and must not be allowed to be lower than 3/8" from the top (6 threads) at any time. It is recommended that the oil be changed after every 100 hours of operation. To drain the oil, remove the oil drain plug and collect the oil in a suitable container. Be sure to replace the plug securely before adding new oil. Use a special compressor oil such as Sears 9-71441 or SAE 20-20W SF motor oil. (crankcase oil capacity is 16 fluid ounces.) Under extreme winter conditions use 10 weight oil.

## Air Tank - Draining Water

### WARNING

WATER WILL CONDENSE IN THE AIR TANK. IF NOT DRAINED, THE WATER WILL CORRODE AND WEAKEN THE AIR TANK, CAUSING A RISK OF AIR TANK RUPTURE.

Water should be drained from the air tank after each use. Operate the unit to apply 15-20 PSIG and open the drain cock. Continue operating unit until all moisture is removed from the air tank. Close the drain cock tightly.

### NOTE

If drain cock valve is clogged, release air pressure in air tank. The drain cock valve can then be removed, cleaned and reinstalled.

## Check Valve - Inspection and Replacement

Remove the check valve for inspection or replacement if air tank pressure will not build up. Use the following procedure to inspect, clean or replace the check valve.

1. Release air pressure from the air tank.
2. Loosen the top and bottom nuts and remove the outlet tube.
3. Unscrew the check valve (turn counterclockwise) using a 7/8" diameter 1/2" socket wrench.
4. Check that the valve disc moves freely inside the check valve and that the spring holds the disc in the upper, closed position. The check valve may be cleaned with a solvent.
5. Reinstall the check valve (turn clockwise). The valve stem should still move freely -- do not over tighten. Apply sealant to the check valve threads.
6. Replace the outlet tube and tighten top and bottom nuts.

# MAINTENANCE

## Safety Valve - Inspection

### WARNING

IF THE SAFETY VALVE DOES NOT WORK PROPERLY, OVER-PRESSURIZATION MAY OCCUR, CAUSING AIR TANK RUPTURE OR EXPLOSION. OCCASIONALLY PULL THE RING ON THE SAFETY VALVE TO MAKE SURE THAT THE SAFETY VALVE OPERATES FREELY. IF THE VALVE IS STUCK OR DOES NOT OPERATE SMOOTHLY, IT MUST BE REPLACED WITH THE SAME TYPE OF VALVE.

## Motor

The motor has a thermal overload protector. If the motor overheats for any reason, the overload protector will shut off the motor. The motor must be allowed to cool down before restarting. De-energize power supply. To restart, depress the reset button located on the end of the motor and energize the power supply.

### NOTE

If the overload protector shuts the motor off frequently, check for a possible voltage problem. Low voltage can also be suspected when:

1. the motor does not get up to full power or speed;
2. fuses blow out when the motor is started;
3. lights dim when motor is started and remain dim while it is running.

## Belt - Replacement

### WARNING

SERIOUS INJURY OR DAMAGE MAY OCCUR IF PARTS OF THE BODY OR LOOSE ITEMS GET CAUGHT IN MOVING PARTS. NEVER OPERATE THE COMPRESSOR WITH THE BELT GUARD REMOVED. THE BELT GUARD SHOULD BE REMOVED ONLY WHEN THE POWER TO THE COMPRESSOR IS DISCONNECTED.

The motor is mounted on an adjustable motor base.

To replace belt:

1. Turn off and lock out power source.
2. Remove screws from the back of the belt guard.
3. Loosen the four motor mounting screws.
4. Slide the motor toward the compressor pump.
5. Remove belt and replace.

### NOTE

The belt should be centered over the grooves on the flywheel and motor pulley.

6. Push the motor back into regular position and tighten bolts securely. Proper tension is approximately 1/4" belt deflection measured midway between the pulley and flywheel when a 3 pound weight or equivalent finger pressure is applied at this point. A loose belt will squeal at compressor start-up.
7. Replace beltguard and screws.

## Pulley and Flywheel - Alignment

The compressor flywheel and motor pulley must be in line (in the same plane) within 1/16" to assure belt retention within sheave grooves. The motor mounting holes on the saddle are skewed to square the motor with the compressor mounting hole as the belt is tensioned. To check alignment, disconnect electrical power and remove the belt guard. Place a straightedge against the outside of the flywheel and measure the distance from it to the nearest groove. Alignment is achieved when the other end of the straightedge is within 1/16" of the measured dimension at the pulley grooves. Squareness is achieved when the pulley grooves are in equal distance from the straightedge on both sides of the motor shaft.

# TROUBLESHOOTING GUIDE

## WARNING

UNIT CYCLES AUTOMATICALLY WHEN POWER IS ON. WHEN DOING MAINTENANCE, YOU MAY BE EXPOSED TO VOLTAGE SOURCES, COMPRESSED AIR OR MOVING PARTS. PERSONAL INJURIES CAN OCCUR. BEFORE PERFORMING MAINTENANCE OR REPAIR, TURN OFF AND LOCK OUT ELECTRIC POWER AND BLEED OFF AIR TANK PRESSURE. NEVER OPERATE THE COMPRESSOR WITH THE BELT GUARD REMOVED.

| PROBLEM  | CAUSE   | CORRECTION   |
|--|---|--|
| Excessive tank pressure - safety valve pops off. | Pressure switch does not shut off motor when compressor reaches "cut-out" pressure.   | Pressure switch must be replaced.  |
| Air leaks at fittings or hose.                   | Tube or hose fittings are not tight enough.   | Tighten fittings where air can be heard escaping. Check fittings under soapy water solution. DO NOT OVERTIGHTEN.   |
| Air leaks at check valve.                        | Defective or dirty check valve.   | Remove and clean or replace check valve. DO NOT OVERTIGHTEN.   |
| Air leaks at pressure switch release valve.      | Defective pressure switch release valve.  | Remove and replace the release valve.  |
| Air leaks at air tank welds.                     | Defective air tank.   | Air tank must be replaced.<br><br><div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <b>WARNING</b> </div> DO NOT DRILL INTO, WELD, OR OTHERWISE MODIFY AIR TANK. IT WILL BE WEAKENED.  |
| Air leaks from safety valve.                     | Possible defect in safety valve.  | Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced.   |
| Knocking noise.                                  | Restricted check valve.<br>Loose pulley.<br>Low oil level.<br>Loose flywheel.<br>Loose compressor bolts.<br>Loose belt.<br>Carbon build-up. | Remove and clean or replace.<br>Tighten pulley set screw.<br>Maintain prescribed oil level.<br>Tighten screw.<br>Check bolts. Tighten as required.<br>Tighten wing nut on motor mount.<br>Remove the head and valve plate. Clean the valve plate and the top of the piston. (Be sure carbon does not fall into the cylinder.) Reassemble to 25-30 ft. lbs. using new gasket and torque screws. |
| Motor will not run.                              | Motor overload protection switch has tripped.<br><br>Tank pressure exceeds pressure switch "cut-in" pressure.                               | Let motor cool off and overload switch will automatically reset. Let the motor cool off and reset switch by pressing the red button located on the end of the motor.<br><br>Motor will start automatically when tank pressure drops below "cut-in" pressure of pressure switch.  |

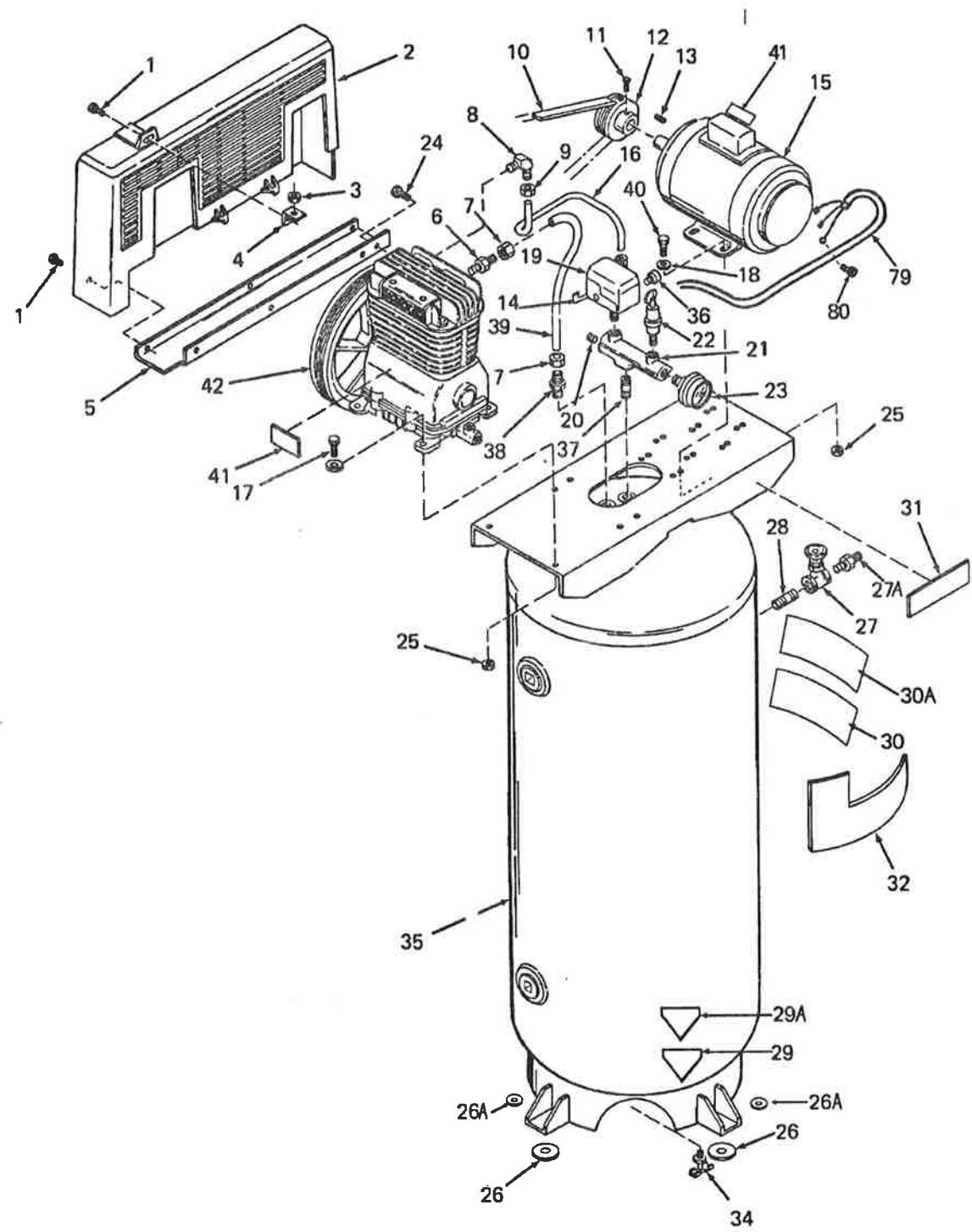
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## TROUBLESHOOTING GUIDE

| PROBLEM  | CAUSE  | CORRECTION  |
|--|--|---|
| Motor will not run.<br><i>(Continued)</i>                      | Check valve stuck -- fails to relieve head pressure; motor cannot start.<br><br>Loose electrical connections.<br><br>Possible defective capacitor.<br><br>Possible defective motor.<br><br>Fuse blown, circuit breaker tripped.<br><br><br><br><br><br><br><br><br><br>Pressure release valve on pressure switch has not unloaded head pressure. | Remove and clean or replace. (Do not overtighten.)<br><br>Check wiring connection inside pressure switch and terminal box area.<br><br>Return to Sears Service Center for inspection or replacement if necessary.<br><br>Have checked at a local Sears Service Center.<br><br>1. Check fuse box for blown fuse and replace if necessary. Re-set circuit breaker. Do not use a fuse or circuit breaker with higher rating than that specified for your particular branch circuit.<br>2. Check for proper fuse; only "Fusetron" Type T fuses are acceptable.<br>3. Check for low voltage conditions.<br>4. Remove check valve and clean or replace if it is stuck open or closed.<br>5. Disconenct the other electrical appliances from circuit or operate the compressor on its own branch circuit.<br><br>Bleed the line by pushing the lever on the pressure switch to the OFF position, opening the pressure release valve. If the valve sitll doesn't open, it must be replaced. |
| Restricted air intake.   | Dirty air filter.  | Clean or replace with new.  |
| Compressor is not supplying enough air to operate accessories. | Prolonged excessive use of air.<br><br>Compressor is not large enough for air requirement.<br><br>Restricted air intake filter.<br><br>Loose belt.<br><br>Hole in hose.<br><br>Check valve restricted.<br><br>Air leaks.   | Decrease amount of air usage.<br><br>Check the accessory air requirement. If it is higher than the pressure supplied by your air compressor, you need a larger compressor.<br><br>Clean or replace air intake filter.<br><br>Adjust belt tension.<br><br>Check and replace if required.<br><br>Remove and clean or replace.<br><br>Tighten fittings. (See Air Leaks Section of Troubleshooting Guide.)  |
| Excessive belt wear.   | Loose belt.<br><br>Tight belt.<br><br>Loose pulley.  | Adjust tension.<br><br>Adjust tension.<br><br>Check for worn keyway or pulley bore. Also check for bent motor shaft. Replace parts if necessary.  |
| Squealing sound.   | Loose belt.<br><br>There is no oil in the compressor.  | Adjust belt tension.<br><br>Add oil.  |

***SERVICE NOTES***

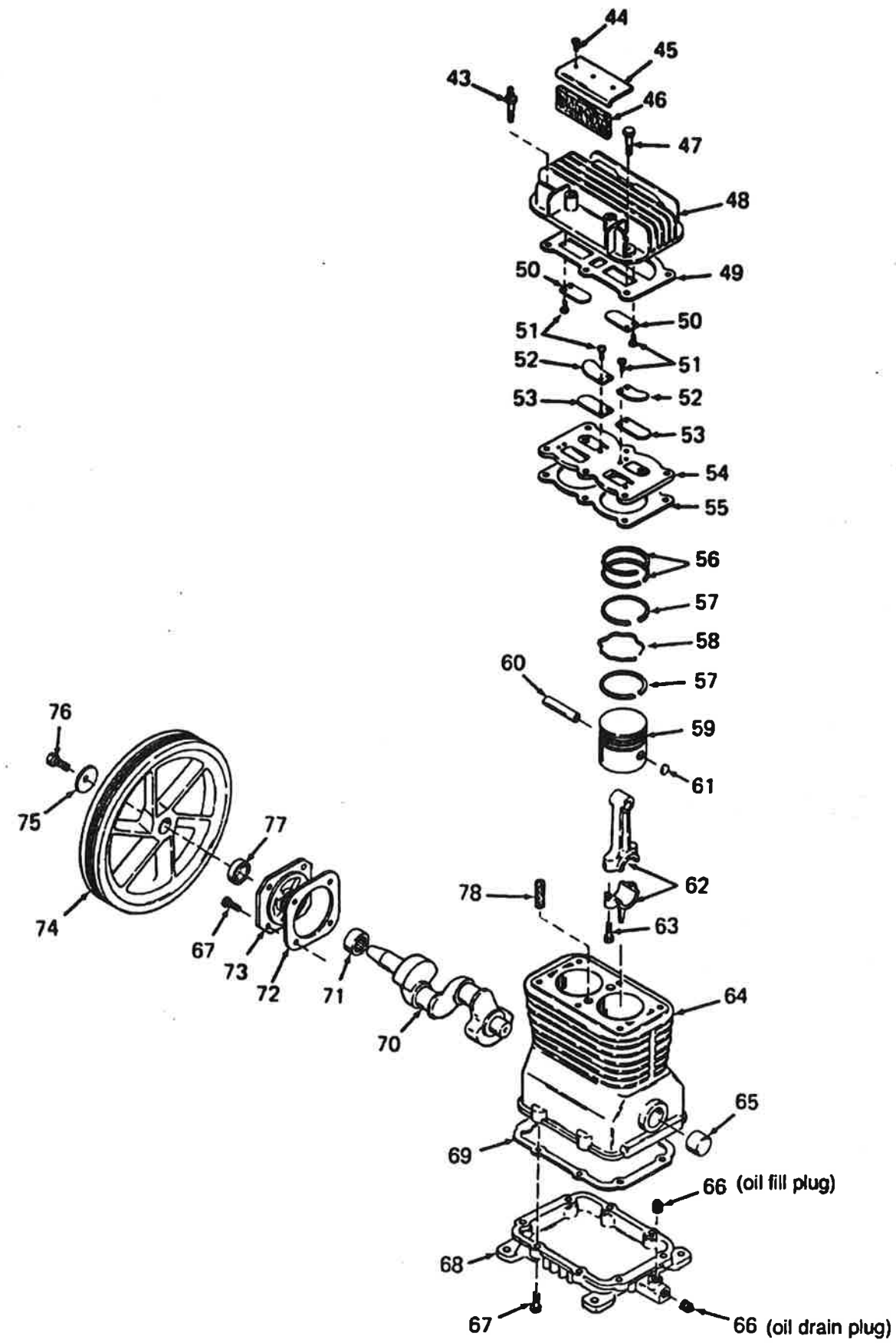
# AIR COMPRESSOR DIAGRAM



## PARTS LIST



| KEY NO. | PART NUMBER | DESCRIPTION  |
|---------|-------------|--|
| 1       | SSF-953-ZN  | Self tapping screw (4 used)  |
| 2       | CAC-22-1    | Belt guard   |
| 3       | SSF-8113-ZN | Lock nut   |
| 4       | CAC-2       | Bracket  |
| 5       | CAC-362     | Belt guard closure   |
| 6       | SSP-9401    | Connector  |
| 7       | STD575026   | Nut-sleeve assembly (2 used)   |
| 8       | SSP-6422    | Elbow  |
| 9       | STD575025   | Nut-sleeve assembly  |
| 10      | C-BT-224    | Poly-V belt  |
| 11      | SS-391      | Set screw  |
| 12      | C-PU-2868   | Motor pulley   |
| 13      | STD580104   | Key  |
| 14      | CAC-1017    | Conduit connector  |
| 15      | MO-7061     | Motor - 5 HP   |
| 16      | DAC-52      | Pressure release tube  |
| 17      | SS-14-CD    | Cap screw 5/16"-18-1" (4 used)                                       |
| 18      | SS-6506-CD  | Flatwasher (8 used)  |
| ✓19     | CAC-4221-1  | Pressure switch  |
| 20      | SS-3222-CD  | Pipe plug  |
| 21      | CAC-95      | Manifold   |
| 22      | TIA-4150    | Safety valve   |
| 23      | C-GA-346    | Gauge  |
| 24      | SSF-985-ZN  | Screw (3 used)   |
| 25      | SSF-8110-ZN | Nut 5/16"-18 (8 used)  |
| 26      | CAC-1003    | Isolator washer (4 used)   |
| 26 A    | SS-1525-CD  | Wrought washer - 3/8"  |
| 27      | SSV-1       | Globe valve  |
| 27 A    | CAC-1141    | Adapter 1 1/2" NPT x 1/4" NPSM                                       |
| 28      | SS-2073     | Nipple   |
| 29      | LA-2092     | Drain Daily Label (French)   |
| 29 A    | LA-1978     | Drain Daily Label (English)  |
| 30      | CL-52       | Model No. Label  |
| 30 A    | LA-1969     | Maintenance Label  |
| 31      | LA-2368     | Performance Label  |
| 32      | LA-1811-1   | Sears Logo Label   |
| 34      | SS-2707     | Drain valve  |
| 35      | TA-4191     | Air receiver - 50 imp. gal.  |
| 36      | SSW-7367    | Strain relief  |
| 37      | SSP-2110    | Nipple   |
| 38      | CAC-437-2   | Check valve  |
| 39      | CAC-357     | Outlet tube  |
| 40      | SS-12-CD    | Cap screw 5/16"-18 x 3/4" (4 used)                                   |
| 41      | LA-1852     | Warning - Hot Surface Label (2 used)                                 |
| 42      | CAC-4029    | Compressor pump assembly (includes key no. 43 through 78, inclusive) |

# COMPRESSOR PUMP DIAGRAM





## PARTS LIST

| KEY NO. | PART NUMBER | DESCRIPTION   |
|---------|-------------|---|
| 43      | SSF-6627    | Stud (2 used)   |
| 44      | SSF-935     | Screw #8-32 x 3/8" (2 used)   |
| 45      | 265-18      | Filter retainer   |
| 46      | 9-16279     | Filter  |
| 47      | SSF-955     | Screw 3/8"-16 x 1 1/2" (4 used)   |
| 48      | CAC-293     | Head  |
| 49      | CAC-291     | Head gasket   |
| ●50     | 265-25      | Intake flapper valve<br>(2 used on head)                     |
| ●51     | SSF-9821    | Screw (8 used)  |
| 52      | CAC-294     | Restrictor plate (2 used)   |
| ●53     | 265-196     | Flapper valve with corner bevels<br>(2 used on valve plate)  |
| 54      | CAC-288     | Valve plate   |
| 55      | CAC-54-1    | Valve plate gasket  |
| +56     | CAC-56      | Compression ring (4 used)   |
| +57     | CAC-58      | Oil ring (4 used)   |
| +58     | CAC-57      | Oil ring expander (2 used)  |
| 59      | CAC-55      | Piston (2 used)   |
| 60      | 265-19      | Piston pin (2 used)   |
| 61      | CAC-207     | Piston pin plug (4 used)  |
| 62      | 265-410     | Connecting rod assembly (2 used) Includes two SSF-927 screws  |
| 63      | SSF-927     | Screw 1/4"-20 x 1 1/8" (4 used)   |
| 64      | CAC-51      | Crankcase and cylinder  |
| 65      | 265-41      | Needle bearing  |
| 66      | SSP-1413    | Oil fill/drain plug (2 used) (1/4" NPT)   |
| 67      | SSF-925     | Cap screw 1/4"-20 x 7/8" (12 used)  |
| 68      | 265-3       | Base  |
| 69      | 265-16      | Base gasket   |
| 70      | CAC-373     | Crankshaft  |
| 71      | 265-23      | Needle bearing  |
| 72      | 265-13      | End plate gasket  |
| 73      | 265-9       | End plate   |
| 74      | 265-2       | Flywheel  |
| 75      | SSN-1014-ZN | Washer  |
| 76      | STD541437   | Screw   |
| 77      | 265-111     | Oil seal  |
| 78      | 265-6       | Vent filter   |
| 79      | CAC-4205    | Cord Assembly   |
| 80      | SSF-993     | Ground Screw  |
|         | MGP-721970  | NOT SHOWN<br>Owners Manual  |

### Parts Ordering Information

+Key No. 56, 57, 58 only available in Ring Kit KK-4313.

✓Key No. 19, pressure release valve and nut is available as part of Kit KK-4315.

●Key No. 50, 51 and 53 only available in Valve Kit KK-4275.

***SERVICE NOTES***

***SERVICE NOTES***

**SEARS**  
**CRAFTSMAN**

**SERVICE**

**MODEL NO.**

**HOW TO ORDER  
REPAIR PARTS**

**GENERAL MANUAL FOR  
ONE STAGE  
AIR COMPRESSOR**

Now that you have purchased your Sears Air Compressor, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your Sears Air Compressor can be found on the label which is located on the front of the air tank saddle.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PART NUMBER
- PART DESCRIPTION
- MODEL NUMBER
- NAME OF ITEM

If service or repair parts are required for the motor, supply all motor nameplate information including manufacturer's name.

All parts listed may be ordered from any Sears Service Center and most Sears stores.

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

**Sears-Canada, Inc., Toronto, Ont. M5B 2B8**